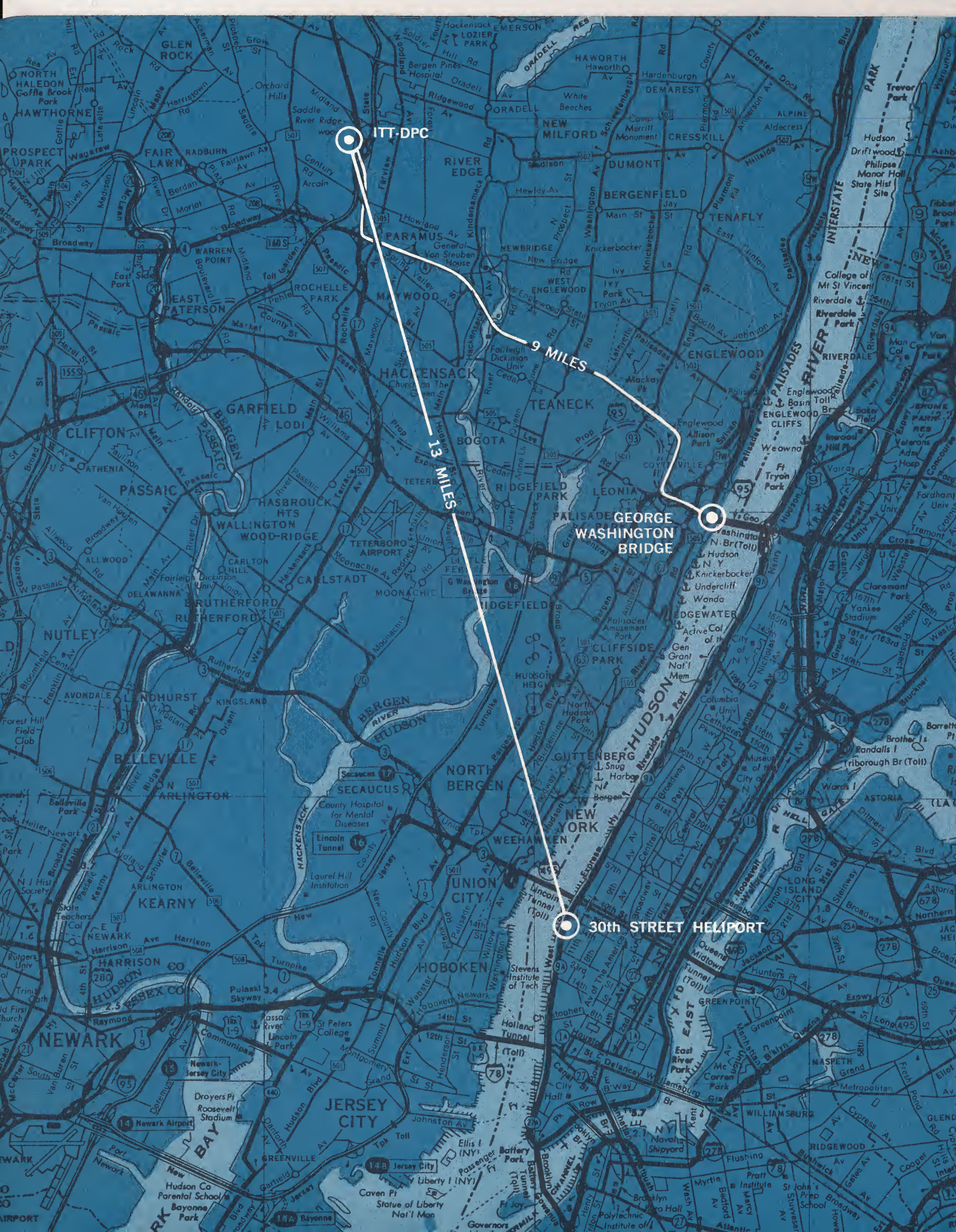




ITT
DATA
PROCESSING
CENTER



INTRODUCTION

Client service is the guiding principle of the ITT DPC, from conceptual approach to problem solving to delivery of work. It is exemplified by maintenance of:

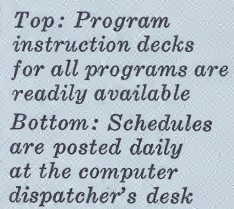
- A staff of 250 system analysts, computer programmers, engineers and statisticians.
- A complex of data processing machinery designed to handle business or scientific problems in the fastest, most efficient manner.
- Data-Phone service to send and receive computer data by wire.
- Radio-equipped station wagons for pick up and delivery of data and/or customers.
- Helicopter service for outlying customers or emergency service.
- Workrooms for customer convenience while visiting ITT DPC.
- A key punch machine set aside exclusively for customer use.

Basic rates for computer time and technical personnel are competitive with no premium for the extra features and services which are the hallmark of the ITT DPC.









THE

The image shows a man in a white shirt standing in front of a large grid of graph paper. The grid is divided into sections by time intervals (0700, 0800, 0900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 0100, 0200, 0300, 0400, 0500). The man is writing on the 2200 section. The grid contains handwritten notes and arrows indicating a schedule or timeline.

	0700	0800	0900	1000	1100	1200
7090	C 16	3442	00000	2/1/1	2/1/1	2/1/1
1401				1/1/1	1/1/1	1/1/1
2401						

	1300	1400	1500	1600	1700
7090	3442	1/1/1	1/1/1	1/1/1	1/1/1
1401	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1
2401					

	1900	2000	2100	2200	2300
7090	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1
1401					
2401					

	0100	0200	0300	0400	0500
7090	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1
1401					
2401					





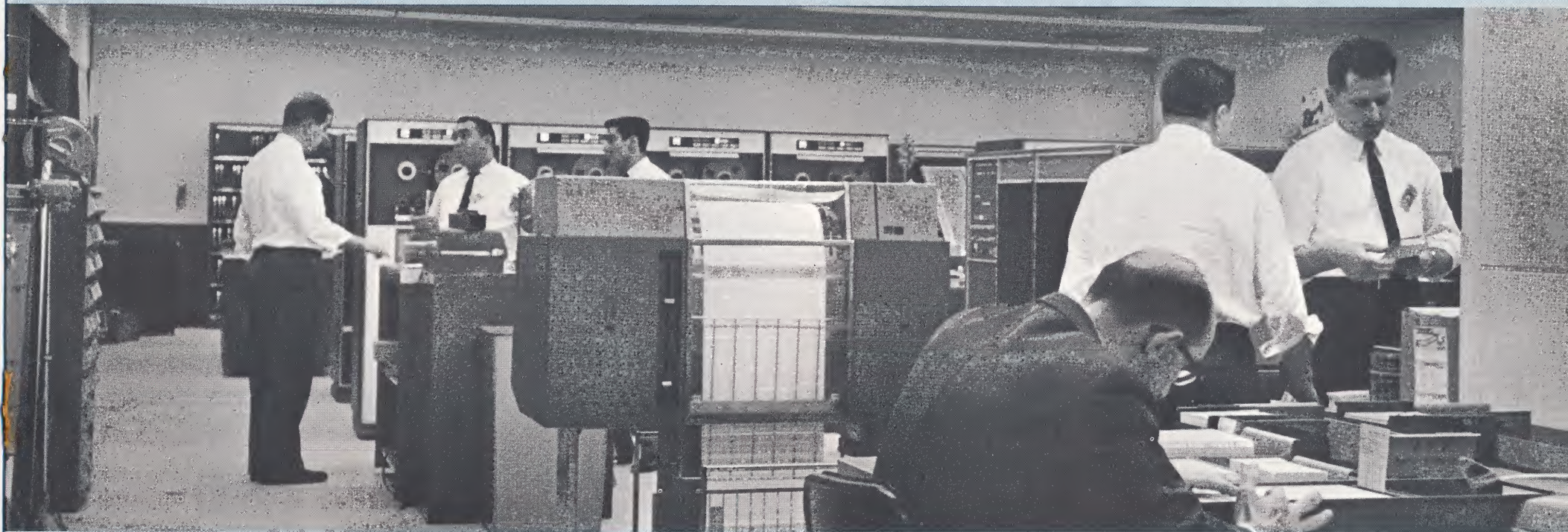
TRAINING DEPARTMENT
CLASSROOM
2B

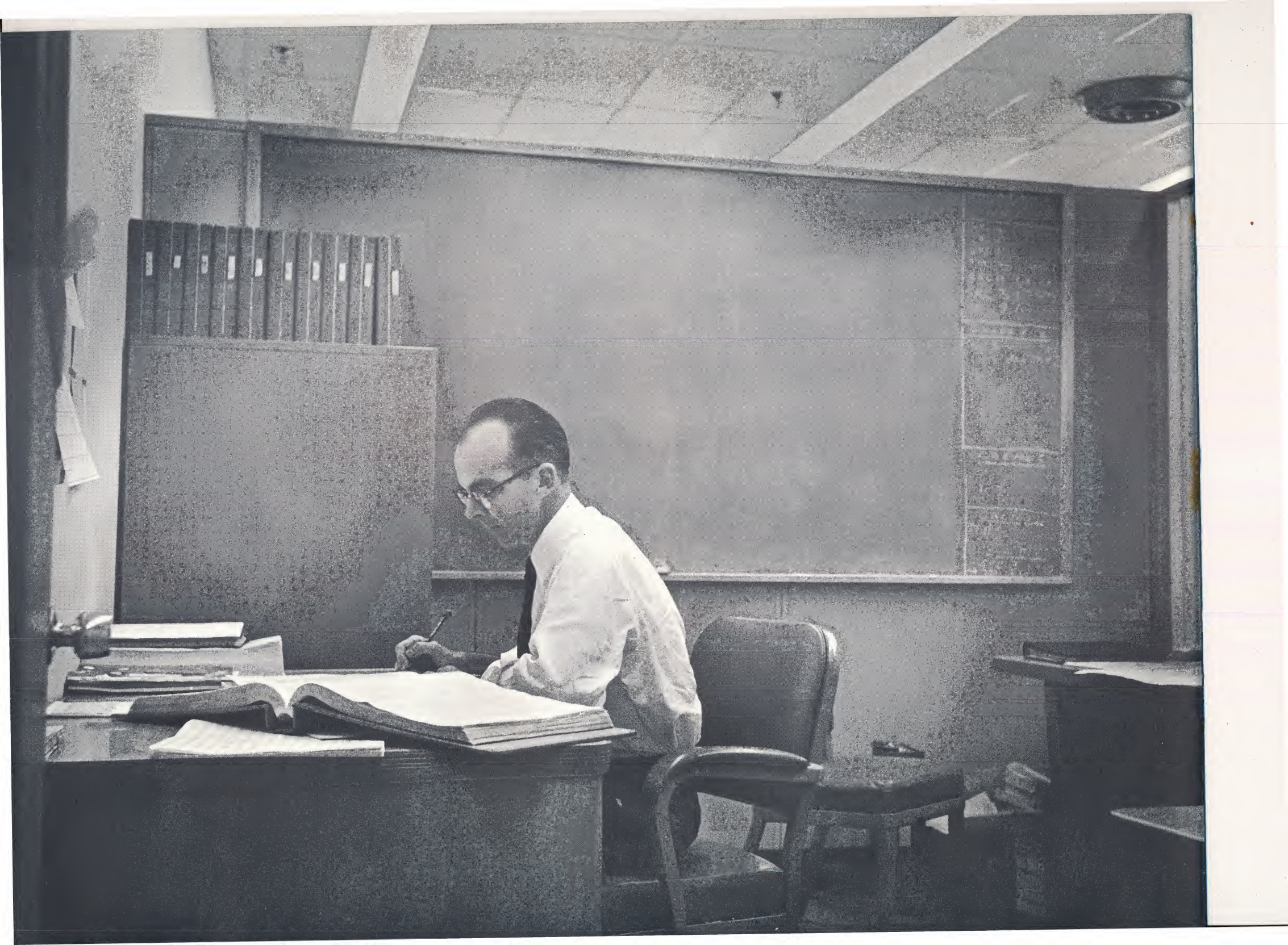


Heart of the ITT DPC is the IBM 7090 computer

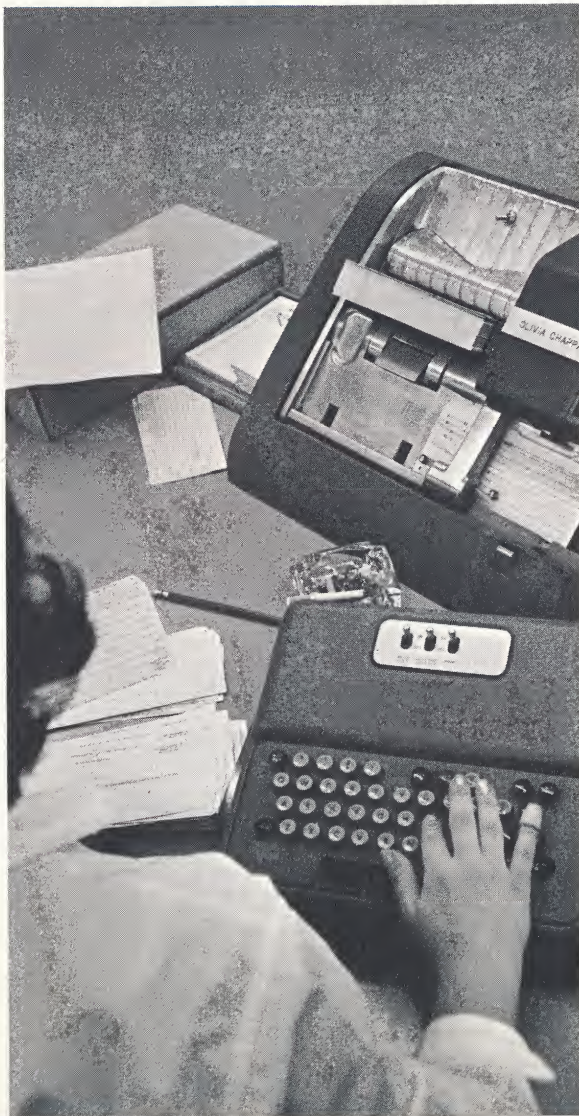


*Supporting and
peripheral equipment
ranges from 1401
computers (top) to
standard tabulation
equipment*





*The man-machine
interface has many facets
at ITT DPC, including
the man-coffee machine
interface (lower left)*





THE ITT DATA PROCES



General Precision, Inc.—Aerospace Group
 International Business Machines
 John Felix Associates
 Lionel D. Edie & Company, Incorporated
 Mack Truck, Inc.
 Mathematica
 McKiernan-Terry Corporation
 Metropolitan Edison Company
 Morgan Guaranty Trust Company
 National Biscuit Company
 New Jersey Bell Telephone Company
 New York State Electric & Gas Company
 New York Trap Rock Corporation
 Oxford University Press
 Philco Corporation
 Public Service Electric & Gas Company
 Radio Corporation of America
 —David Sarnoff Research Laboratories
 Radio Corporation of America
 —Electronic Data Processing Division
 Service Bureau Corporation
 Simulmatics, Incorporated
 Sinclair Refining Company
 Systems Development Corporation
 Tidewater Oil Company
 United Nations
 United States Department of Commerce
 United States Rubber Company
 Urbahn, Roberts, Seelye, & Moran
 Walter Kidde Company





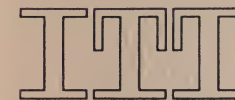
DATA PROCESSING CENTER

P. O. Box 285, Paramus, N. J.

Telephone: Area Code 201, COLfax 2-8700 • Data-Phone: Area Code 201, COLfax 1-3130

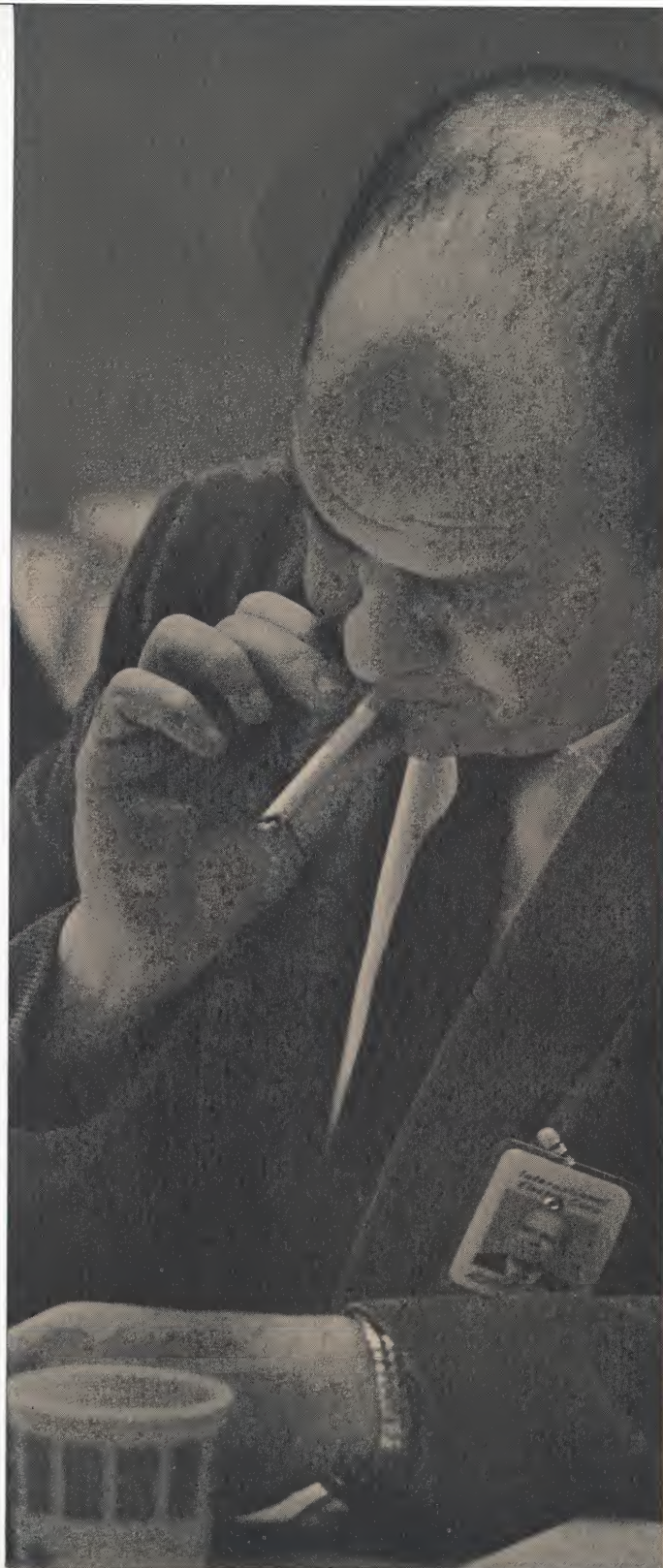
CLIENTS

American Broadcasting Company
American Cyanamid
American Electric Power Service Corporation
American Smelting and Refining Company
American Radiator & Standard Sanitary, Inc.
Ammann & Whitney Consulting Engineers, Inc.
Arde Associates
Atomic Energy Commission
Automatic Data Processing
The Autometric Corporation
Batten, Barton, Durstine & Osborn
Bendix Corporation (Eclipse-Pioneer Division)
Celanese Corporation of America
Chesebrough-Ponds
Cities Service Oil Company
Colgate Palmolive Company
Colman & Hirschman
Computer Usage Company
Computers for Industry and Business
Computronics
Corporacion de Fomento de la Produccion Chile
Curtiss-Wright Corporation
David R. Saunders
E. I. DuPont de Nemours Company
Engelhard Industries, Inc.
F. M. C. Corporation
Federal Aviation Agency
Fischer Stevens, Inc.
Frost & Sullivan, Inc.
General Electric Company



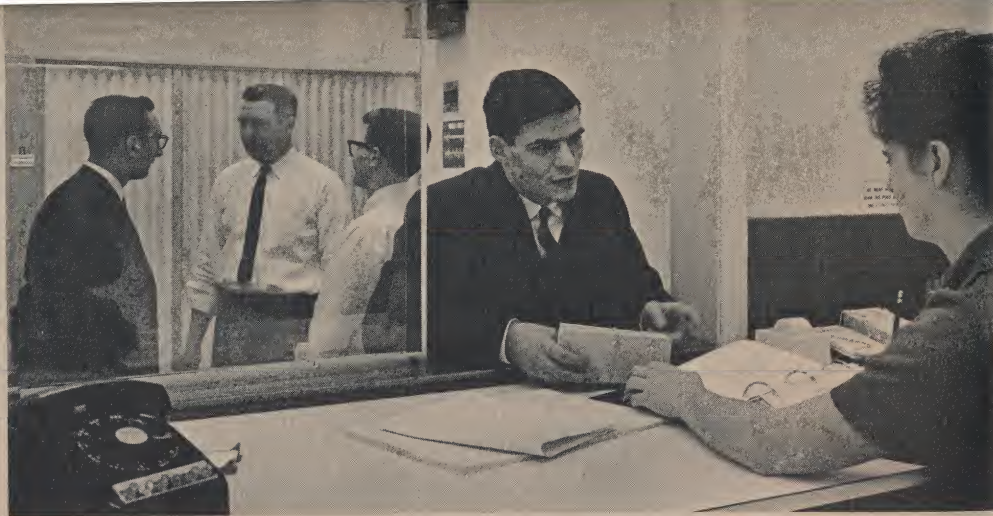
DATA PROCESSING CENTER

The ITT Data Processing Center, located in Paramus, N. J., offers to business, government, and industry one of the most complete and extensive data processing services available in the United States. The ITT DPC is a fully autonomous division of International Electric Corporation, a subsidiary of the worldwide International Telephone and Telegraph Corporation. The ITT DPC makes available, on a commercial basis, the skills developed by International Electric Corporation as the information and data systems division of ITT.



ITT DPC MANAGEMENT

It is only a little more than 15 years since ENIAC (Electronic Numerical Integrator and Calculator), the first electronic computer, began operation at the University of Pennsylvania. In the fantastic growth of electronic data processing since that time, available management talent has necessarily been spread thin. Yet the ITT DPC has been able to assemble a cadre of seasoned professionals and organize them into a stable, businesslike service operation within the framework of ITT. As a disciplined business organization, the objective of the ITT DPC is to provide service at a profit.



ITT DATA SERVICES

The ITT DPC's large staff has seen and dealt with almost every type of analytical problem—and has a solid idea on how to tackle a totally new situation. In addition, the technical staff of the parent International Electric Corporation, on the same premises in Paramus, is on call for backup. This gives the ITT DPC a roster of more than 250 analysts, programmers, mathematicians and engineers.

A complete professional resume of each of these technical specialists is carried in an automated information retrieval program so that a pool of talent in any field of activity can be assembled literally in a matter of minutes.



which are located within 20 feet of the computer room, are large, bright and comfortable. Each contains a blackboard, large desk, chairs, file cabinets, and telephone. Secure storage facilities are maintained for cards and tapes. Conference rooms with blackboards, motion picture screens and other audio-visual aids are also available.

The computer support room, which adjoins the 7090 room, contains a complete array of punched card peripheral equipment, including a keypunch machine exclusively for occasional customer use. Machine operators, supplied as a part of the machine-time package, are fast, accurate, and efficient, making the most of each client's time portion on the computer.

Cafeteria and canteen facilities, serving hot meals at mid-day and beverages all day, are also available to clients.

The ITT DPG is located in the heart of the dynamic, fast-growing northern New Jersey industrial community, less than a mile from shopping centers boasting the top names in American retailing, surrounded by first class restaurants and motels. It is about 13 miles from the theaters, sports arenas, shops and cultural centers of Manhattan.

The ITT DPC is in one of the most accessible spots in the United States. Situated on New Jersey Route 17 at its intersection with the Garden State Parkway, it can be approached by highway from North, East, South or West. It is 25 minutes by automobile from Newark Airport; 45 minutes from LaGuardia Airport; and 10 minutes from Teterboro Airport. The ITT DPC has its own



heliport and offers helicopter service to clients. Its fleet of telephone-equipped station wagons makes scheduled and non-scheduled trips to New York City daily.

The ITT DPC can be reached by:

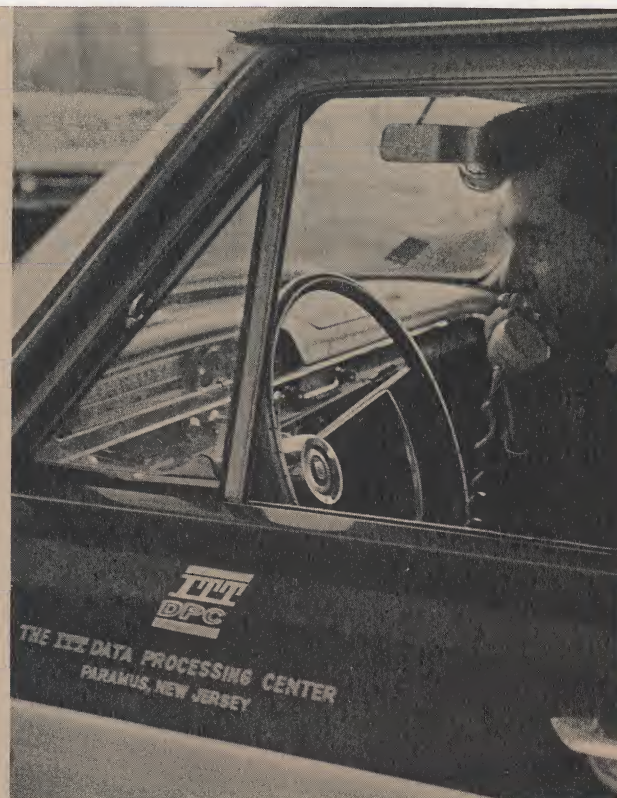
Telephone	Area Code 201	Colfax 2-8700 (days)
	Area Code 201	Colfax 2-6660 (nights and weekends)

Data-Phone	Area Code 201	Colfax 1-3130
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TWX	Area Code 201	262-0421
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Cable (via ITT Headquarters) INTELCO, New York

Through the facilities of the parent ITT corporation and sister companies, the ITT DPC is capable of data transmission on a world wide basis.



Every known means of transportation, including helicopter, radio-equipped station wagon and Data-Phone is used to make ITT DPC readily accessible to clients



Programming skills available include backgrounds on every major computer system in existence as well as familiarity with all of the program languages, such as: FORTRAN, FAP, JOVIAL, MAD, COBOL, ALGOL, IBSYS, etc.

ITT DPC staff experience includes a full range of operations research skills. Some of the more common OR applications in which the ITT DPC has broad experience are: linear programming (technique for selecting a mathematical "best" method of many alternatives—has applications in transportation, refinery scheduling, etc.); mathematical model building (simulation in mathematical terms of a complex operation—production scheduling, large distribution operations, etc.); business gaming (simulating a tactical or strategic situation in mathematical terms and testing the outcome of various hypotheses—used in strategic planning, executive training, etc.).

ITT DPC's technical staff has worked together on many integrated system problems in the past, an intangible experience benefit that adds to its efficiency. The unusual depth and breadth of staff experience gives ITT DPC the capability of handling tough problems without calling in outside specialists and consultants.



Top management keeps track of progress on every job

Plenty of room and privacy for discussions in ITT DPC client rooms

Getting ready to "get on the machine"



ITT DPC FACILITIES

Major computing equipment at the ITT DPC consists of an:

IBM 7090 Electronic Data Processing System—a large scale, general purpose data processing system with the following basic operating characteristics:

- core storage —32,768 thirty-six bit words
- access time —2.18 microseconds
- parallel processing —read, write, compute simultaneously

The following *on-line* input/output equipment is associated with the IBM 7090:

- 711 card reader
 - card reading speed —250 cards per minute
- 716 alphabetic printer
 - printing speed —150 lines per minute
 - print positions per line —120
- 721 punch card recorder
 - card speed —100 cards per minute
- thirteen 729 MOD VI tape drives
 - tape density —200, 566, or 800 characters per inch
 - tape speed —112.5 inches per second
 - character transfer rate —90,000 characters per second

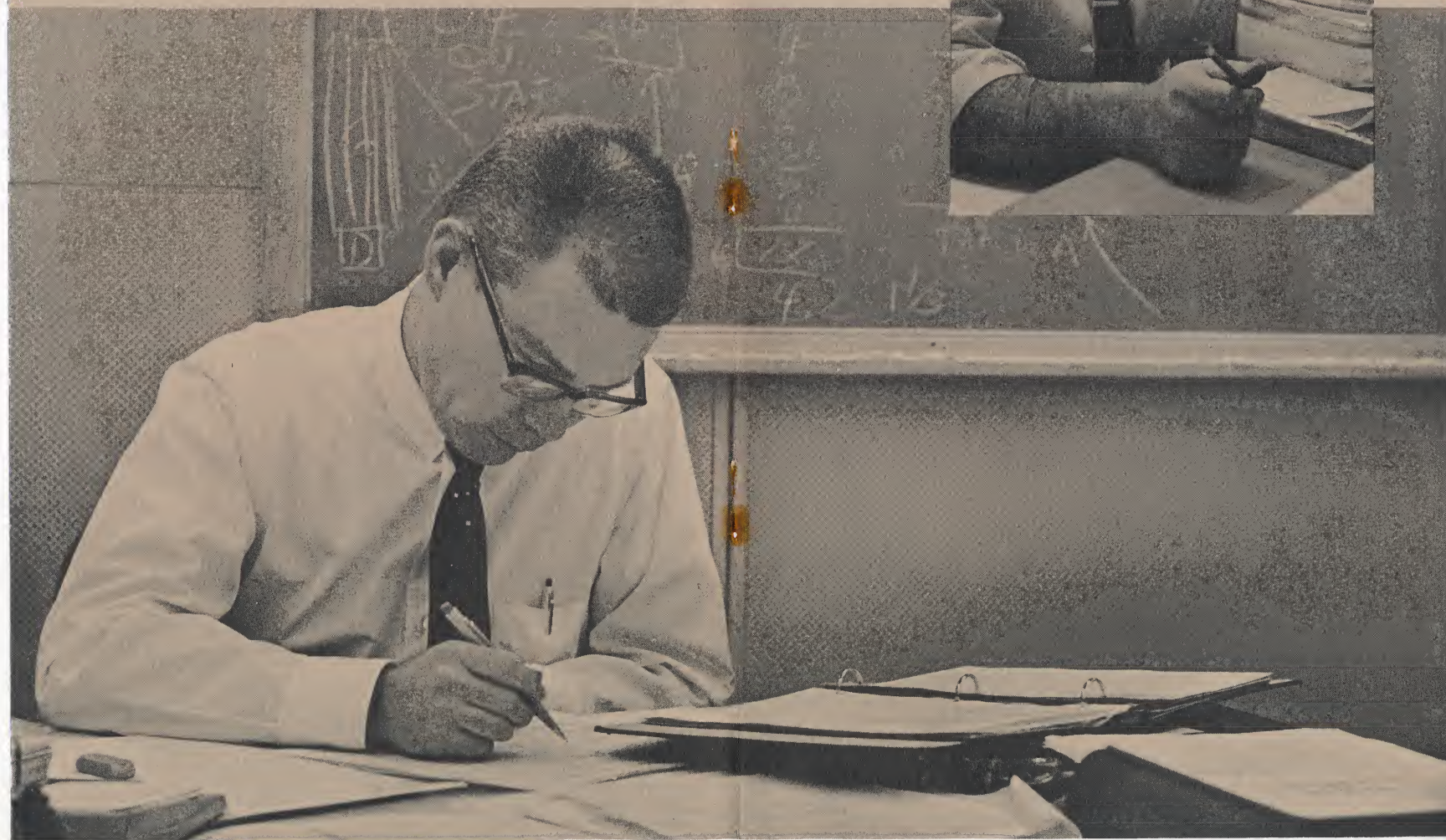
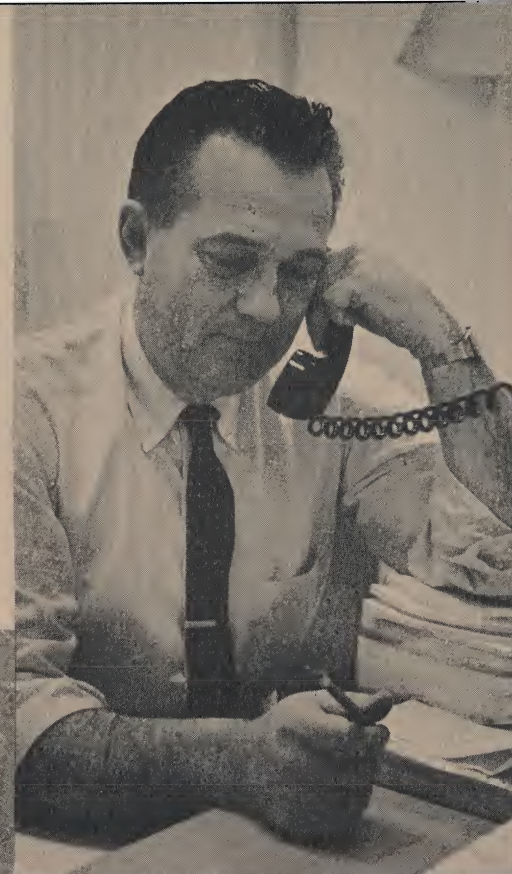
Input/output processing equipment includes:

- one IBM 1401 processing unit with 4,000 position core storage memory
- one IBM 1401 processing unit with 8,000 position core storage memory
- two IBM 1403 printers
- two IBM 1402 card read-punch units
- eight IBM 729 MOD V magnetic tape drives

As it becomes available, ITT DPC plans to add other modern equipment such as the 7094 configuration of the main computer, a high-speed 1460 printer and disc file memory equipment.

Working conditions at the ITT DPC are close to ideal because it was initially laid out as a service operation. The entire facility is on one floor of a new air conditioned building. Customer rooms, all of

*Information
retrieval by
telephone,
computation by
pencil and
paper, are still
vital elements
in automation
age problem
solving*



Training ITT DPC clients to take greater advantage of the new management and engineering techniques made possible through computer utilization is a further ITT DPC service.

Regular seminars are held in such subjects of general interest as PERT. Training courses and seminars in more specialized subjects such as FORTRAN, Common Business Oriented Language (COBOL) and Computer Programming are offered as demand develops.

Operating procedures at ITT DPC have been programmed so that step follows step quickly and logically. Thus the customer knows at all times where he stands with the ITT DPC, what is being done for him and how much it costs.

First—Consultation with ITT DPC personnel to settle on problem definition and method of solution.

Second—Selection of terms of compensation. These are: a) Fixed Price, b) Not to Exceed (a given price), c) Time and Materials.

Third—Reservation of machine, a) The customer informs the supervisor of the time required which is then reserved and posted on a master scheduling board, b) a request card is filled out supplying detailed operational requirements.

Fourth—The DPC dispatcher notifies the customer by phone before his material is run.

Fifth—Delivery of material is made to customer immediately following machine run, along with a detailed record of machine utilization.

Sixth—Billing, on a monthly basis, is fast and accurate.

BUSINESS DATA PROCESSING

Perhaps as important as the ability of computers to untangle large, complex problems is their ability to take over the simple, repetitive drudge work of everyday business. ITT DPC routinely performs for many business organizations accounting services, statistical analysis, sales analysis, economic forecasting and inventory control systems.

Many problem areas common to a variety of businesses have been reduced to general computer programs which, with minor adaptation, can be applied to specific customer problems.

The ITT DPC has a complete program library for the IBM 7090/1401 systems, including SHARE programs. The library includes many special programs designed by ITT DPC. All manuals and technical literature on the use of these programs are available at the ITT DPC. It is estimated that there are some 500,000 program instructions in the ITT DPC library, worth more than \$5,000,000, all of which are available to customers without cost.